

7000 GeV pp

Soft QCD

Intrajet ring p_T density, $10 < N_{ch} \leq 30$ ρ 

CMS



Pythia 8.315 default

0.6

0.5

0.4

0.3

0.2

0.1

0

(CMS_2013_I1261026)

Rivet 4.1.0, 100k events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to CMS

2

1

0.5

2

1

0.5

R

0

0.1

0.2

0.3

0.4

0.2

0.3

0.4

0.5

0.6

0.7

0.8

0.9

1.0

1.1

1.2

1.3

1.4

1.5

1.6

1.7

1.8

1.9

2.0

2.1

2.2

2.3

2.4

2.5

2.6

2.7

2.8

2.9

3.0

3.1

3.2

3.3

3.4

3.5

3.6

3.7

3.8

3.9

4.0

4.1

4.2

4.3

4.4

4.5

4.6

4.7

4.8

4.9

5.0

5.1

5.2

5.3

5.4

5.5

5.6

5.7

5.8

5.9

6.0

6.1

6.2

6.3

6.4

6.5

6.6

6.7

6.8

6.9

7.0

7.1

7.2

7.3

7.4

7.5

7.6

7.7

7.8

7.9

8.0

8.1

8.2

8.3

8.4

8.5

8.6

8.7

8.8

8.9

9.0

9.1

9.2

9.3

9.4

9.5

9.6

9.7

9.8

9.9

10.0

10.1

10.2

10.3

10.4

10.5

10.6

10.7

10.8

10.9

11.0

11.1

11.2

11.3

11.4

11.5

11.6

11.7

11.8

11.9

12.0

12.1

12.2

12.3

12.4

12.5

12.6

12.7

12.8

12.9

13.0

13.1

13.2

13.3

13.4

13.5

13.6

13.7

13.8

13.9

14.0

14.1

14.2

14.3

14.4

14.5

14.6

14.7

14.8

14.9

15.0

15.1

15.2

15.3

15.4

15.5

15.6

15.7

15.8

15.9

16.0

16.1

16.2

16.3

16.4

16.5

16.6

16.7

16.8

16.9

17.0

17.1

17.2

17.3

17.4

17.5

17.6

17.7

17.8

17.9

18.0

18.1

18.2

18.3

18.4

18.5

18.6

18.7

18.8

18.9

19.0

19.1

19.2

19.3

19.4

19.5

19.6

19.7

19.8

19.9

20.0

20.1

20.2

20.3

20.4

20.5

20.6

20.7

20.8

20.9

21.0

21.1

21.2

21.3

21.4

21.5

21.6

21.7

21.8

21.9

22.0

22.1

22.2

22.3

22.4

22.5

22.6

22.7

22.8

22.9

23.0

23.1

23.2

23.3

23.4

23.5

23.6

23.7

23.8

23.9

24.0

24.1

24.2

24.3

24.4

24.5

24.6

24.7

24.8

24.9

25.0

25.1

25.2

25.3

25.4

25.5

25.6

25.7

25.8

25.9

26.0

26.1

26.2

26.3

26.4

26.5

26.6

26.7

26.8

26.9

27.0

27.1

27.2

27.3

27.4

27.5

27.6

27.7

27.8

27.9

28.0

28.1

28.2

28.3

28.4

28.5

28.6

28.7

28.8

28.9

29.0

29.1

29.2

29.3

29.4

29.5

29.6

29.7

29.8

29.9

30.0

30.1

30.2

30.3

30.4

30.5

30.6

30.7

30.8

30.9

31.0

31.1

31.2

31.3

31.4

31.5

31.6

31.7

31.8

31.9

32.0

32.1

32.2

32.3

32.4

32.5

32.6

32.7

32.8

32.9

33.0

33.1

33.2

33.3

33.4

33.5

33.6

33.7

33.8

33.9

34.0

34.1

34.2

34.3

34.4

34.5

34.6

34.7